

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the above-identified application.

Listing of Claims:

1. (Currently amended) A method for assessing predisposition of a human subject for predisposition to a mental disorder phenotype having an association with an at-risk allele of a gene that encodes monoamine oxidase A enzyme, the association being conditioned by a pathogenic environmental risk factor status condition, the at-risk allele characterized by a low activity level of the enzyme in the brain of the subject selected from the group consisting of a conduct disorder, violent behavior and antisocial behavior, the method comprising the steps of:

determining whether the subject carries one or more copies of an at-risk allele a two- or three-repeat allele of a variable number tandem repeat polymorphism within a gene encoding human monoamine oxidase A enzyme, wherein a locus of the gene is amplified by SEQ ID NO:1 and SEQ ID NO:2;

determining whether the subject has experienced, or is at risk of experiencing, the environmental risk factor childhood maltreatment; and

concluding that the subject is predisposed to the phenotype if the subject carries the at-risk two- or three-repeat allele and has experienced, or is at risk of experiencing, the environmental risk factor childhood maltreatment.

2. (Currently amended) The method of Claim 1 wherein the subject carries the at-risk allele two or three repeat allele.

3. (Currently amended) The method of Claim 1 wherein the subject has experienced, or is at risk of experiencing, the environmental risk factor childhood maltreatment.

4.-5. (Cancelled)

6. (Currently amended) The method of Claim 1 wherein the pathogenic environmental risk factor childhood maltreatment is selected from the group consisting of exposure to psychological trauma, exposure to psychosocial stress, and exposure to an unhealthy diet, an infectious agent, exposure to a toxic agent, experience with a pharmacological agent, a medical trauma, and an injury.

7.-8. (Canceled)

9. (Original) The method of Claim 1 further comprising the step of counseling the subject to pursue or avoid a particular type of employment.

10. (Currently amended) The method of Claim 1 further comprising the step of counseling the subject to avoid the environmental risk factor childhood maltreatment.

11. (Original) The method of Claim 1 further comprising the step of prescribing a therapy selected from the group consisting of psychological therapy and pharmaceutical therapy.

12.-26. (Canceled)